

ON LINE INSTALLATION OPERATION AND SERVICE MANUAL FOR THE VENT FREE FIREPLACE IN THE OLD SALEM COLLECTION



American National
Standards Institute

Complies with ANSI Z21.11.2

THIS ONLINE MANUAL IS FOR PLANNING PURPOSES ONLY. CAREFULLY READ BEFORE PURCHASING. REFER TO INSTALLING MANUAL PROVIDED WITH YOUR APPLIANCE FOR MOST RECENT INSTALLATION AND OPERATING INSTRUCTIONS FOR YOUR APPLIANCE.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance

WHAT TO DO IF YOU SMELL GAS:

- *Do not try to light any appliance.**
- *Do not touch any electrical switch; do not use any phone in your building.**
- *Immediately call your gas supplier from a neighbors phone. Follow the gas supplier's instructions.**
- *If you cannot reach your gas supplier; call the fire department.**

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

This is an unvented gas fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. See Section 2

MADE IN THE USA

*For more information contact
Old Salem Hearths*

*Winston Salem, North Carolina 27106
336 682 3241 www.coalbaskets.com*

WARNING: If the information in this manual is not followed exactly, a fire or

explosion may result causing property damage, personal injury or loss of life.

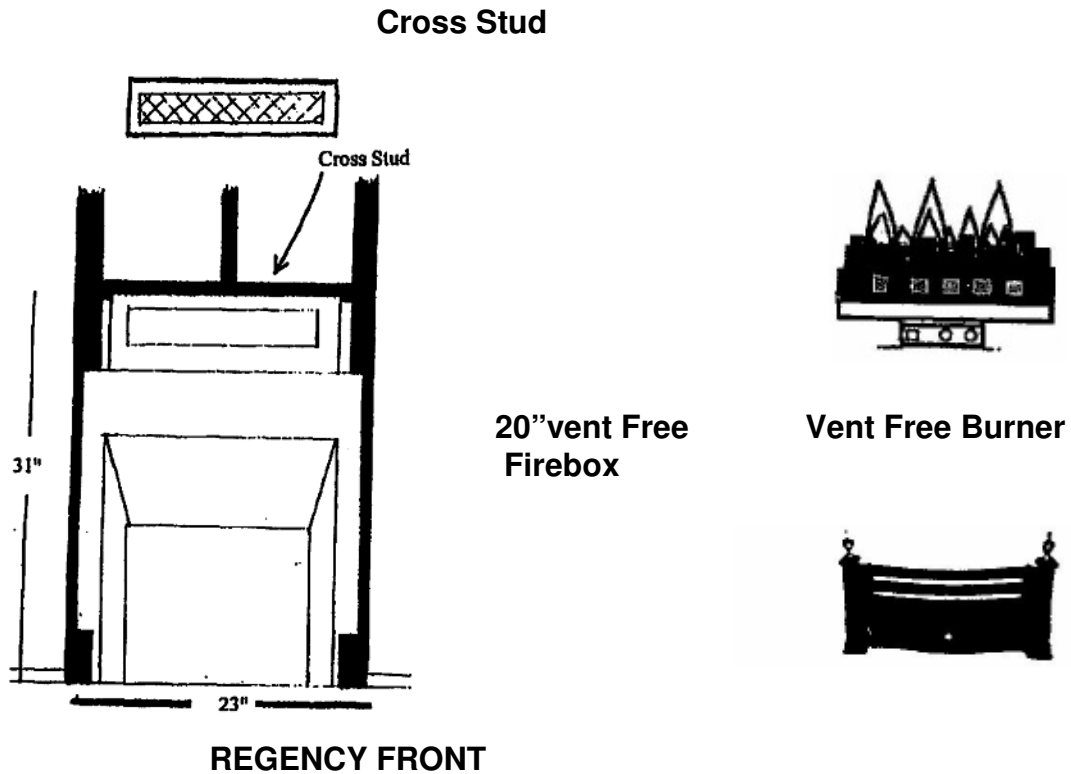
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The Ventfree Assemblage consists of a large firebox and a small firebox which are bolted together to make the 20" Zero Clearance Firebox. This is a sheet metal enclosure for the coal set.

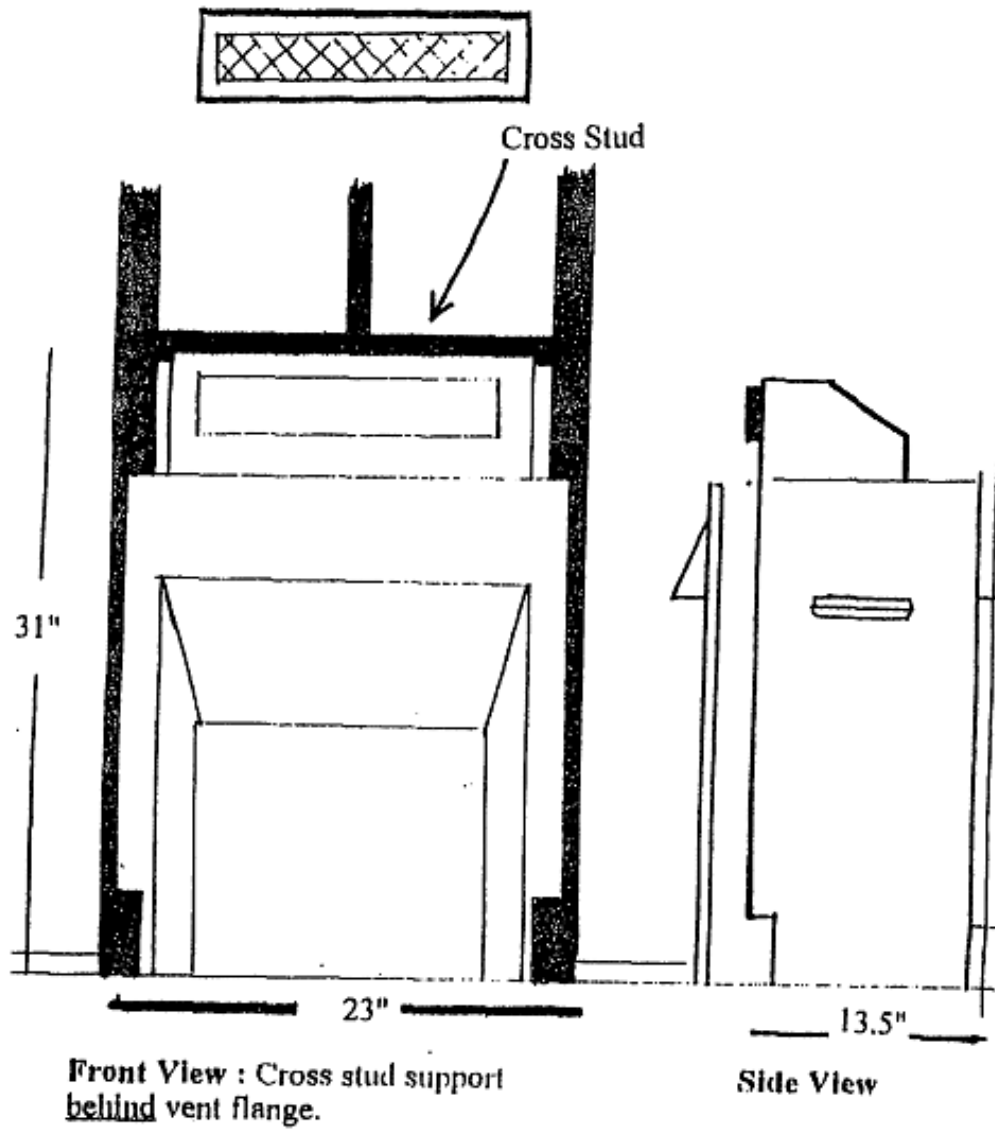
We offer the Evans grate and the Classic or Low-cut coal burner which comes as a complete unit or the 19" Regency front and a separate coal burner.

DRAWINGS:

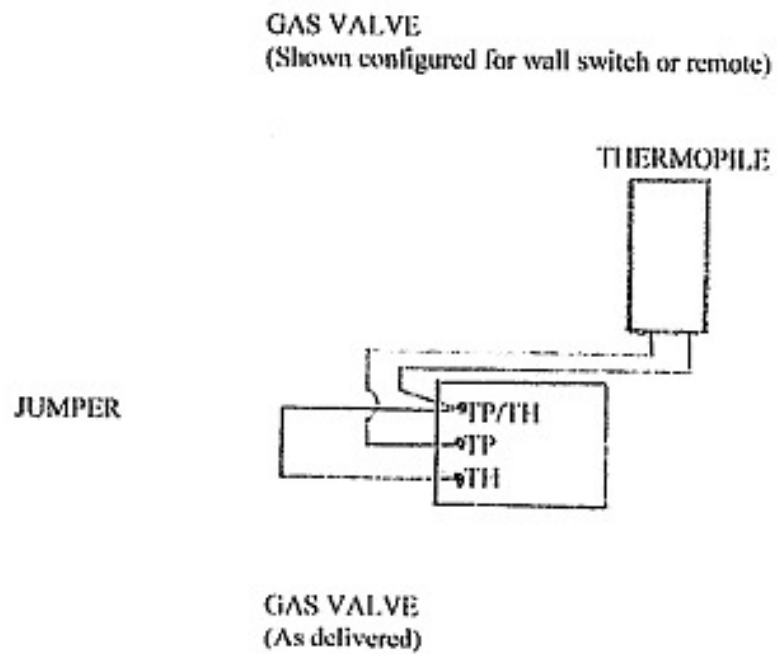
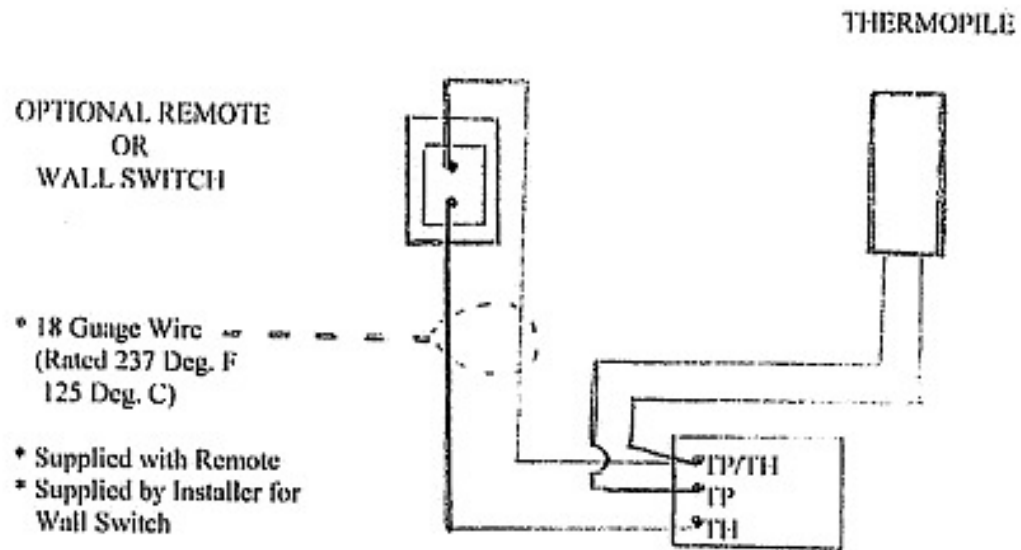


Front View: Cross stud support behind vent flange.





SCHEMATIC OF THE ELECTRICAL CONNECTIONS FOR VARIOUS INSTALLATIONS.



GENERAL INSTRUCTIONS FOR THE VENTFREE 20" ZERO CLEARANCE FIREPLACE ASSEMBLAGE - IMPORTANT SAFETY INFORMATION

WARNING: This appliance is for installation only in new stud/fireproof sheet rock or masonry construction.

(a) The minimum size of the opening in the framing structure should be:

Width: 23.5"

Depth: 13.5"

Height: 34"

The inside measurements of the firebox are:

Width 20"

Depth: 10"

Height: 21.5"

(b) The firebox with simulated brick refractory lining delivers the combustion products to a 3x16 inch opening to a front exhaust system. The combustion products are exhausted through a grill which is placed above the firebox opening. The combustion products must be exhausted into the same room as the burner to facilitate the oxygen depletion protection.

(c) Cast iron surrounds are available for the firebox and are accessories. The firebox may also be faced with customer provided masonry or tile, etc.

(d) No combustible materials shall be placed or burned in the firebox of this fireplace assemblage.

(e) The firebox and zero clearance box with the exhaust option is provided as a completed assembly.

(f) Cutting any sheet metal parts of the ventless firebox enclosure is prohibited.

(g) Never burn solid fuels in a fireplace where a gas coal set is installed.

(h) This unit complies with ANSI Z21.11.2 Unvented Heaters.

(i) The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA54.

(j) The flow of combustion and ventilation air **MUST NOT** be obstructed.

(k) Provide adequate clearances around air openings into the combustion chamber and adequate accessibility clearance for servicing and proper operation. **NEVER** obstruct the front opening of the appliance.

(l) Solid-fuels shall not be burned in a masonry or UL 127 factory-built fireplace in which an unvented room heater is installed.

WARNING: Some state or local codes may not allow operation of unvented appliances. Check your state or local codes.

2) COMBUSTION AIR

(a) WARNING: If the area in which the appliance is to be operated is smaller than 750 cubic feet, or if the building is of an unusually tight construction, adequate combustion and ventilation air must be provided by one of the methods described in the National Fuel Gas Code ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation, or applicable local codes.

Unusually tight construction is defined as construction where:

- (1) Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of 1 perm (6×10^{-10} kg per pa-sec-m²) or less with openings gasketed or sealed;**
 - (2) Weather stripping has been added on openable windows and doors; and**
 - (3) Caulking or sealants are applied to areas such as joints around windows and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, gas lines, and at other openings.**
- (1,) The coal burner has been equipped with an oxygen depletion system to prevent reduction of the oxygen level in the installation room from reaching a level below 18 percent. The above requirements are provided to prevent the unlikely occurrence of this level.**

3) MINIMUM CLEARANCE TO COMBUSTIBLES:

When our approved coal burner is installed in the firebox, the mantel, if used, may extend up to 12 inches maximum from the wall and must be located a minimum of 18 inches above the top of the exhaust grill. Since the combustion gasses will exit the top of the grill the underside of the mantel should be protected by a high temperature paint or application of a non-combustible lamination.

When installed in a corner location, there must be a minimum clearance of 10 inches from the outer edge of the firebox opening and the corner wall with the intervening space made of non combustible materials, cast iron surround, masonry, tile etc. there must be a non combustible hearth extending a minimum of 14 inches in front of the firebox.

Overall minimum clearances to combustibles on the outside of firebox are:

Sides: 6"

Top: 18"

Hearth: 14"

4) INSTALLATION INSTRUCTIONS FOR THE 20" VENTFREE ZERO CLEARANCE FIREBOX ASSEMBLAGE

IMPORTANT: The main gas supply shutoff valve/tap must never be located inside the fire box and must be within arm's length from the fire and accessible at all times. The manufacturer cannot and will not accept any warranty claim if the appliance has not been installed to comply with the following instructions and with local and National Codes.

Prepare the opening in the stud wall or masonry construction leaving the following clearances:

Width between studs 23 ½ inches

Depth 13 ½ inches

Height 34 inches (above the hearth or other non combustible material)

The bottom of the firebox must sit on noncombustible material at a level equal to the finished hearth. This is best accomplished by installing the hearth material first and extending it into the area which will house the assemblage. If a cast iron surround is to be used, the hearth material must extend on both sides of the firebox opening flush with the stud wall so that the cast iron surround may rest upon it. This will space the surround properly to fit with the front grill.

Prior to installation of the fireproof sheetrock, remove the grill (save the screws) and slide the fireplace assemblage into the opening in the studs (or masonry) and fasten it in place by screws, or anchors, through the side flanges. Note that the side and back spacers will provide an air gap around the box.

Install the gas supply plumbing for the coal set in accordance with the installation operation and service manual provided.

If a cast iron surround is to be used, install the sheetrock or fireplace surround material to the stud or masonry wall leaving a clearance of 1 inch around the firebox opening. Cut a hole in the fireproof sheetrock or surround material above the firebox to match the exhaust opening to within 1/4 inch. The fireproof sheetrock may be attached to the top, bottom and sides of the exhaust port flange by drilling through the material and flange and fastening by using an appropriate length sheet metal flat head screw. (Standard sheetrock attachment screws may be used with a 3/32" diameter drill. For fireproof surround material, refer to the instructions for that material for appropriate attachment method (i.e. bonding, etc.).

When the fireproof sheetrock or surround material is appropriately finished, install the exhaust grill by sliding the extended portion of the grill into the exhaust opening and fastening the grill in place by drilling through the fireproof sheetrock/surround material with a 3/32" diameter drill and screwing the grill in place using the screws which were removed at the start of the installation. The cast iron surround may then be installed by placing it centered, on the hearth material, drilling two 5/32" diameter holes and anchoring it in place using the two screws provided through the counter sunk holes in the top two corners.

If a masonry or tile surround technique is to be used, the appropriate techniques

shall be used by the installer, however, there shall be no combustible materials within 4 inches of the fireplace opening.

The bottom of the firebox must sit on noncombustible material at a level equal to the finished hearth. This is best accomplished by installing the hearth material first and extending it into the area which will house the firebox/outer box assemblage. If a cast iron surround is to be used, the hearth material must extend on both sides of the firebox opening flush with the stud wall so that the cast iron surround may rest upon it.

Prior to installation of the fireproof sheetrock, tilt the firebox and slide it into the opening in the studs (or masonry) and fasten it in place by screws, or anchors, through the side flanges. Note that the side and back spacers will provide an air gap around the box.

Install the gas supply plumbing for the coal set in accordance with that section of this Installation manual.

5) OPERATION

The ventfree firebox is a passive sheet metal installation and as such has no operating instructions. Its use, however, with an approved coal set must be in compliance with the section for installation of that appliance.

6) CLEANING PROCEDURE

CAUTION: Only the simplest of cleaning such as dusting the grill or firebox floor is required.

Do not use cleaning chemicals.

7) GENERAL MAINTENANCE

(a) INSTALLATION AND REPAIRS SHOULD BE DONE BY A QUALIFIED AND CERTIFIED SERVICE PERSON. IT IS OF THE UTMOST IMPORTANCE THAT THE CIRCULATION AIR PASSAGEWAYS OF THE FIREBOX BE KEPT CLEAN.

(b) WARNING: Do not burn combustibles of any kind in the firebox.

8) TROUBLE SHOOTING

The ventfree firebox is a purely passive device and trouble shooting is not applicable.

INSTALLATION INSTRUCTIONS FOR THE COAL SET

The approved coal set is a ventless appliance consisting of an integrated burner control and a simulated coal fire. There are no loose parts nor any field assembly required. It may be configured to fit an existing grate and cover plate. Cast iron surrounds are available as a decorative option.

9) GENERAL INSTRUCTIONS - IMPORTANT SAFETY INFORMATION

WARNING: These instructions are for installation only in the 20" Ventfree Zero Clearance Fireplace Assemblage.

WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.

WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this unit.

(a) A fireplace screen must be in place when the appliance is operating. The screen must have openings for introduction of combustion air.

(b) No combustible materials shall be placed or burned in the fireplace where the appliance is installed.

(c) Any safety screen or guard removed for servicing must be replaced prior to operating the appliance.

(d) The coal set is provided as a completed assembly with no loose pans. If improper handling should result in one or more of the coals becoming loosened, the coals must be repositioned in exactly the same position into which they were first attached. Should there be any doubt as to that location or if the coals will not remain in that position during operation, the unit must be repaired by a factory approved repair man or returned to the factory for repair.

(e) An unvented room heater having an input rating of more than 6,000 BTU per hour shall not be installed in a bathroom.

(f) An unvented room heater having an input rating of more than 10,000 Btu per hour shall not be installed in a bedroom.

(g) Correct installation of coals, proper location of the heater and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace.

(h) Note: Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that the control compartment, burners and circulating air passageways of the appliance be kept clean.

(i) An unvented room heater intended for installation in a solid-fuel burning fireplace shall comply with these instructions.

(j) This heater is equipped with a PILOT LIGHT SAFETY SYSTEM designed to turn off the the heater if not enough fresh air is available.

(k) DO NOT TAMPER WITH THE PILOT LIGHT SAFETY SYSTEM

(l) If heater shuts off, do not relight until you have provided fresh air. If heater keeps shutting off, have it serviced. Keep burner and control compartment clean. Call your installer or Grate Fires. (m) Do not use this room heater if any part has been under water.

WARNING: When used without adequate combustion air, heater may give off CARBON MONOXIDE, an odorless, poisonous gas.

WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

WARNING: State or local codes may not allow operation of unvented appliances. Check your state or local codes.

10) APPLIANCE LOCATION CLEARANCE

(a) Due to high temperatures the appliance should be located out of traffic and away from furniture and draperies.

(b) Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.

(c) Young children should be carefully supervised when they are in the same room as the appliance.

(d) Do not place clothing or other flammable materials on or near the appliance.

(e) Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the heater.

(f) Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that the control compartment, burners and circulating air passageways of the appliance be kept clean.

(g) WARNING: any change to this heater or its controls can be dangerous.

(h) This appliance is intended for supplemental heating.

11) NATURAL GAS PIPING

(a) The installation must conform with local codes or in the absence of local codes, with the current National Fuel Gas Code ANSI Z223.1/NFPA 54.

(b) Before any system of gas piping is finally put into service, it should be carefully tested to ensure it is gas tight. As an aid in determining where the gas may leak, it is recommended that a soap suds solution be used. Under no condition shall a live flame or fire be used to locate a gas leak.

(c) The minimum inlet gas pressure permissible is 5 inches W.C. for natural gas.

(d) The maximum inlet gas supply pressure permissible is 7.7 inches W.C. (3.48 kPa) Natural Gas.

(e) A ½ inch natural gas supply pipe is required to ensure adequate capacity. It is recommended that either a flexible metallic hose or a union be placed in the supply piping to facilitate the easy removal and servicing of the appliance.

(f) Standard units are available with a maximum rating of 13,400 BTU per hour at sea level. Adjustment of orifice size may be required to altitudes above 2,000 feet. Appliances with a maximum rating of 10,000 BTU per hour at sea level, suitable for bedroom installation are available upon request.

12) VENTING

(a) No venting per se is required, however, review section “2) COMBUSTION AIR” for information relative to air availability requirements.

13) INSTALLATION INSTRUCTIONS FOR THE APPROVED COAL BURNERS

IMPORTANT: The main gas supply shut-off valve/tap must never be located inside the firebox and must be within arm’s length from the fire and accessible at all times.

The manufacturer cannot and will not accept any warranty claim if the appliance has not been installed to comply with the following instructions and with local and National codes as noted above.

(a) With the controls facing the front, center the burner in the base of the firebox. When properly positioned, no part of the burner may project beyond the vertical opening of the fireplace. Mark this location and rotate the assembly to provide visibility of the gas input connection.

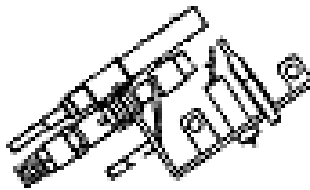
(b) It is recommended that a rigid 3/8" pipe be run through the masonry into the firebox area. Using an approved flexible gas hose connect to line from the fixed pipe to the gas input to the appliance. All pipe work going through masonry should be sleeved in conduit. Where pipe work is liable to come into contact with fresh cement, cover with Denzo or similar electrical tape to protect the pipe from corrosion.

(c) The 3/8" flexible hose should be no longer than 6 feet. The supply pressure at the appliance should be no less than 5 inches W.C. for natural gas. After correctly installing the appliance and before connecting the supply to the burner, "blow out" any dust particles that could have entered the new pipework by opening up the gas supply for a few seconds so as not to clog the burner.

(d) Connect the gas to the appliance input. Carefully test to ensure that there are no leaks using a soap suds solution. DO NOT USE A FLAME TO LOCATE A GAS LEAK.

(e) The coal burner, when installed in a bedroom, must be secured to the firebox floor using masonry screws. Holes are provided on the base of the unit.

14) OPERATION AND LIGHTING INSTRUCTIONS FOR YOUR SAFETY READ BEFORE LIGHTING



WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.**
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.**

WHAT TO DO IF YOU SMELL GAS

- * Do not try to light any appliance.**

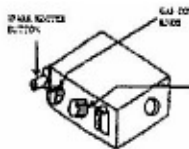
- * Do not touch any electric switch; do not use any phone in your building.
 - * Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - * If you cannot reach your gas supplier. Call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this sheet.
2. If using a grate, remove control access panel below grate.
3. Push in gas control knob slightly and turn counter clockwise 4— to "OFF"

NOTE: Knob cannot be turned from "Pilot" to "OFF" unless the knob is pushed in slightly. Do not force.

4. Wait five minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this page. If you don't smell gas, go to the next step.



5. Push in gas control knob slightly and turn clockwise —, to "Pilot."

6. Depress the control knob fully and push spark igniter button several times to light the pilot.

7. Continue to hold the control knob in for about 60 seconds after the pilot is lit.

NOTE: If the pilot extinguishes, repeat steps 1,2,3 and 4.

8. Turn the control knob clockwise —. to "ON".
9. Adjust the HI-LO flame control knob to desired setting.

**NOTE: *If the unit is hot, wait 5 minutes to relight the pilot.
*If control knob does not pop up when released STOP, and immediately call
your service technician or gas supplier.**

10. Replace control access panel below grate.

11. Wall switch or remote may now be used to turn main flame ON and OFF.

TO TURN OFF GAS TO APPLIANCE

1. Remove control access panel below grate.

2. Push in gas control knob slightly and turn clockwise to “OFF” position. Do not force.

3. Replace control access panel below grate.

Note: There will be some delay after the pilot light valve is compressed before the piezo igniter will light the pilot due to the air remaining in the control valves etc. If after about 3 to 5 minutes the piezo igniter still fails to light the pilot, the pilot may be lit manually as follows:

- (1) Position the control knob to “PILOT” position.**
- (2) While depressing the control knob, light the pilot from beneath with a match.**
- (3) Hold the control knob down for 0 seconds.**
- (4) Contact your service technician or gas supplier to replace the defective unit.**

The flame level has been preset for relatively small changes in BTU level. At first ignition, only the blue and yellow flames will be visible. After a few minutes, the coals on the rear stack will

start to glow. The amount of glow and the height of the flames are restricted to the critical nature of the exhaust gas constituents. This level has been tested extensively and a copy of the test results have been included in the shipment. Should any of the coals become mislocated and the flame pattern changes drastically, contact your distributor immediately.

The coal burner unit is repairable only at the manufacturer.

If a Grate Fires remote control system is to be used, refer to drawing on Page 5 of this manual.

15) CLEANING PROCEDURE

CAUTION: Only the simplest of cleaning such as dusting the cast iron grate and control mechanism etc. is allowed. The latter must be accomplished by a qualified service person. If coals become loose contact Grate Fires.

16) GENERAL MAINTENANCE

(a) INSTALLATION AND REPAIRS SHOULD BE DONE BY A QUALIFIED AND CERTIFIED SERVICE PERSON. IT IS RECOMMENDED THAT THE APPLIANCE BE INSPECTED BEFORE EACH USE FOR DAMAGE TO THE COALS AND AT LEAST ONCE A YEAR BY A PROFESSIONAL CERTIFIED SERVICE PERSON. IT IS OF THE UTMOST IMPORTANCE THAT THE CONTROL COMPARTMENT AND CIRCULATION G AIR PASSAGEWAYS OF THE APPLIANCE BE KEPT CLEAN.

(b) WARNING: Do not burn combustibles of any kind in this appliance. Do not use this appliance if any part has been under water, immediately call a qualified service technician to inspect the appliance and determine if the appliance must be returned to the manufacturer for repair and calibration.

17) TROUBLE SHOOTING

There are limited tests that can be accomplished in the absence of a qualified technician. Such obvious items such as the main gas valve to the appliance being off or the smell of raw gas being due to an incorrect connection should be checked. In the event of some other malfunction a phone call to your certified maintenance technician is recommended. Should such a person be unavailable, call the manufacturer immediately for assistance in talking through the problems and symptoms.

IMPORTANT: The appliance is not field repairable due to the sensitive nature of the requirements for Carbon Monoxide emissions. Only an approved certified technician with certified equipment for measuring the CO emissions may accomplish repairs to this unit.

——FOR YOUR SAFETY——IF YOU SMELL GAS:

- * Open windows.
- * Don't touch any electrical switches; do not use any phone in your building.
- * Extinguish any open flame.
- * Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- * If you cannot reach your gas supplier, call the fire department.

18) GUARANTEE

Coal Grate Fire burners and fuel effect components only are guaranteed against breakage in normal use at their replacement cost for a period of twelve months from the date of purchase. All other components are guaranteed against defect in materials and workmanship for one year from the date of purchase, and any replacement WILL NOT include labor charges. Any claim under this guarantee must be accompanied by a copy of the original retail purchase invoice clearly showing the date of purchase and returned to the supplier. This guarantee will be invalidated if the appliance is not fitted by a certified technician in strict accordance with these instructions. If you have a problem, contact the manufacturer.

PLEASE NOTE:

In the interest of product development and the introduction of any new relevant mandatory gas requirement, Grate Fires reserves the right to modify and amend the appliance(s) and instructions as and when deemed necessary without prior notice. Diligence has been taken to compile these instructions in order to cover all building/gas utilization code requirements. It is our intention to cover every occurrence of the Company's involvement with ventfree heaters. The Company will not accept any liability for any omissions in these instructions. It is the gas installation contractor that must check for current compliance with the legal requirements of installation. These instructions are issued by Grate Fires who have made every effort to make sure that they relate to the North American market place, particularly where safety is concerned.

REPLACEMENT PARTS LIST

Type of Control	Manufacturer of Control	Pan Number
Natural Gas ODS Valve	SIT Controls	820.63 7
NO 005 Pilot Assembly	SIT Controls	8204C
Piezo Igniter	SIT Controls	073.953

MADE IN THE USA

For more information contact
Old Salem Hearths
Winston Salem, North Carolina 27106
336 682 3241 www.coalbaskets.com